

highest possible location. Weights must be substituted for operating personnel at 165 pounds (734 Newtons) per individual and may be substituted for fishing gear. The substitute weights may be located transversely so that the vessel floats level prior to being submerged. The two largest air chambers, or compartments of a decked vessel not used as fuel tanks, that contribute buoyancy to the vessel must be flooded.

(f) For the test described in paragraph (d) of this section, a vessel must be complete and loaded as described in paragraph (e) of this section, except that the center of gravity of the equivalent maximum fish load must be located to one side of the vessel's centerline by a distance equal to one-fifth of the maximum transverse dimension of the fish storage space.

§§ 28.520—28.525 [Reserved]

§ 28.530 Stability instructions.

(a) *Intent.* The intent of this section is to ensure that vessel masters and individuals in charge of vessels are provided with enough stability information to allow them to maintain their vessel in a satisfactory stability condition. The rules provide maximum flexibility for owners and qualified individuals to determine how this information is conveyed, taking into consideration decisions by operating personnel must be made quickly and that few operating personnel in the commercial fishing industry have had specialized training in stability. Therefore, stability instructions should take into account the conditions a vessel may reasonably be expected to encounter and provide simple guidance for the operating personnel to deal with these situations.

(b) Each vessel must be provided with stability instructions which provide the master or individual in charge of the vessel with loading constraints and operating restrictions which maintain the vessel in a condition which meets the applicable stability requirements of this subpart.

(c) Stability instructions must be developed by a qualified individual.

(d) Stability instructions must be in a format easily understood by the master or individual in charge of the ves-

sel. Units of measure, language, and rigor of calculations in the stability instructions must be consistent with the ability of the master or the individual in charge of the vessel. The format of the stability instructions may include, at the owner's discretion, any of the following:

- (1) Simple loading instructions;
- (2) A simple loading diagram with instructions;
- (3) A stability booklet with sample calculations; or

(4) Any other appropriate format for providing stability instructions.

(e) Stability instructions must be developed based on the vessel's individual characteristics and may include the following, as appropriate for the format chosen for presentation:

(1) A general description of the vessel, including lightweight data;

(2) Instructions on the use of the information;

(3) General arrangement plans showing watertight compartments, closures, vents, downflooding angles, and allowable weights;

(4) Loading restrictions, such as diagrams, tables, descriptions or maximum KG curves;

(5) Sample loading conditions;

(6) General precautions for preventing unintentional flooding;

(7) Capacity plan or tank sounding tables showing tank and hold capacities, centers of gravity, and free surface effects;

(8) A rapid and simple means for evaluating any specific loading condition;

(9) The amount and location of fixed ballast;

(10) Any other necessary guidance for maintaining adequate stability under normal and emergency conditions;

(11) A general description of the stability criteria that are used in developing the instructions;

(12) Guidance on the use of roll limitation devices such as stabilizers; and

(13) Any other information the owner feels is important to the stability and operation of the vessel.

§ 28.535 Inclining test.

(a) Except as provided in paragraphs (b) and (c) of this section, each vessel for which the lightweight displacement